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09/802,734

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Trudy D. Stetzler

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TEXAS INSTRUMENTS INCORPORATED  
P O BOX 655474, M/S 3999  
DALLAS, TX 75265

EXAMINER

CORRIELUS, JEAN B

ART UNIT

PAPER NUMBER

2637

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/802,734

Applicant(s)

STETZLER ET AL.

Examiner

Jean B Corrielus

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☒ Claim(s) 25 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

Claims 1-25 are objected to because of the following informalities: claim 1, line 1, “, the digital radio system” is redundant and therefore should be deleted. Claim 10, line 4, “an” should be “said/the” so as to make use of antecedent in line 1; line 6, “a decoding” should be “the/said decoding” so as to make use of antecedent in line 1. Claim 12, line 2, “installing step” should be replaced by “step of installing the decoding algorithm” so as to be consistent with antecedent in claim 10, line 6. Claim 16, line 3, “a transmitter unit” should be “the/said transmitting unit” so as to be consistent with recitation in lines 1-2; line 4, shouldn’t “train” be “circuit? Claim 18, line 1, “.” Should be deleted. Claim 25, “the encoding” should be “ encoding”; line 7, “shouldn’t “of” be inserted after “the encoding”; last line, “the signals” should be “signals”. Claim 25, recites “the encoder, however, there is no connection between such limitation and subsequent limitations recited in the claims. Note that any claim whose base claim is objected is likewise objected. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15, 18, 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 3, recites "the signal stream". However, there is no antecedent basis for such limitation as claimed.

The limitation "receiver unit user" recited in claim 3, line, lacks of proper antecedent basis.

Claim 6, the limitations " the updated decoding algorithm" and "the transmission format" lack of proper antecedent basis.

Claim 10 the limitation " the encoding and decoding algorithms" lacks of proper antecedent basis. The same comment applies to the limitation "the programmable processor".

Claim 12, line 2, the limitation "the receiver unit user" lacks of proper antecedent basis.

Claims 13-15 and 21-24, " the transmission format" lacks of proper antecedent basis, respectively.

Claim 18 "the user " lacks of proper antecedent basis.

Note that any claim whose base claim is rejected is likewise objected.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Chow et al US Patent No. 6,243,572.

Chow et al discloses a digital radio system (fig. 2) comprising a transmitter unit (see transmit path in fig. 2) including a transmitter programmable processor 232 (Note that DSP's are programmable devices) wherein the signal stream transmitted by the transmitter unit (transmit section) is encoded with encoding algorithm (234) installed in the DSP (transmitter programmable processor) and at least one receiver unit (see the received path of fig. 2) including apparatus for receiving the signal stream transmitted by the transmit section of fig. 2 (transmitter unit) and converting the signal stream into a digital format signal stream using element 254; a DSP 236 (receiver programmable processor) for decoding the digital format signal using a decoding algorithm 238 installed in the DSP (receiver programmable processor), wherein the decoding algorithm is provided inherently by the manufacturer of the receiver and transmitter. Note that in order to built the system the manufacturer has to select the parts according to system design. Hence the parts, including the decoding scheme, have to be provided/selected by the manufacturer of the system.

As per claim 10, Chow teaches the steps of installing an encoding scheme 234 in the programmable processor of the transmitter 232 and providing and installing a decoding algorithm 238 in the programmable processor 236.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 5, 12, 16, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al in view of Davis et al.

As per claim 4, as applied to claim 1 above, Chow et al discloses every feature of the claimed invention but does not explicitly teach that the decoding algorithm is transmitted to the receiver at predetermined time.

In the same field of endeavor, Davis et al teaches, at a receiver a controller processed a received signal from a transmitter for retrieving new decoding and operating parameter see abstract.

Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Chow et al so as to take advantage of the ever increasing technological advances with respect to coding see col. 3, lines 12-14.

As per claim 2, Davis further teaches the reception of the of the decoding algorithm as part of the signal stream and separating the decoding algorithm from the remainder of the signal stream and the receiver processor is to install the decoding algorithm for decoding the remaining signal see abstract. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Chow et al and the reasons to combine would have been the same as provided in reference to claim 4.

As per claim 5, note that at col. 3, lines 12-23, Davis et al teaches it is desirable to replace previous coding/decoding schemes with newer versions. It would have been obvious to one of ordinary skill in the art to implement such a teaching in Chow et al in order to maximize communication message capability see Davis col. 3, lines 21-23.

Claim 12 is analyzed the same way as claim 4 and in addition, it would have been obvious to one of ordinary skill in the art to have the receiver unit user installing the decoding algorithm in the programmable processor so as to avoid the need to dispatch a technicians that would have resulted in additional cost to the user since a fee would have normally been charged for the service.

As per claim 16, Chow teaches the receiver unit includes antenna 267 for receiving a signal stream from a transmitter unit see fig. 2; a receiver unit for converting the signal stream into a digital format signal stream using element 254; a DSP 236 (receiver programmable processor) for decoding the digital format signal using a decoding algorithm 238 installed in the DSP (receiver programmable processor), wherein the decoding algorithm is provided inherently by the manufacturer of the receiver and transmitter. However, Chow does not explicitly teach the further limitation of "when the digital stream requires a different decoding algorithm for decoding, the programmable processor installs a new decoding algorithm therein. Davis teaches the further limitation of "when the digital stream requires a different decoding algorithm for decoding, the programmable processor installs a new decoding algorithm therein see abstract. Given that fact, it would have been obvious to one skill in the art to incorporate

such a teaching in Chow et al so as to take advantage of the ever increasing technological advances with respect to coding see col. 3, lines 12-14.

As per claim 17, Davis teaches the processor identifies the new decoding algorithm and install it. See abstract. It would have been obvious to one skill in the art to incorporate such a teaching in Chow et al and the reasons to combine would have been the same as provided in reference to claim 16.

As per claim 19, Davis teaches the processing of the received signal to derive the decoding scheme see abstract. The algorithm has to be received first at a set time period prior to retrieving the new coding scheme. The reason to do so would have been to ensure that the correct coding scheme is retrieved prior to decoding the signal.

As per claim 20, the predetermined time inherently has to be a period of time.

Claims 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al in view of Tsui US Patent No. 6,005,508.

As per claim 13, as applied to claim 1 above, Chow et al discloses every feature of the claimed invention but does not explicitly teach that the encoding and decoding algorithms refer to algorithms for encoding and decoding transmission format. Tsui discloses decoding algorithm for decoding transmission format see col. 5, lines 46-48 and col. 4, lines 63-65. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Chow et al so as to allow the receiver with the capability to translate the received signal into the original format corresponding to the



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transmitted signal and to allow the transmitter with the enhanced capability to convert the signal in a format suitable for transmission.

As per claim 21, it would have been obvious to one skill in the art to incorporate such a teaching in Chow et al so as to allow the receiver with the capability to translate the received signal into the original format corresponding to the transmitted signal.

Claims 15, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al in view of Davis et al and further in view of Tsui US Patent No. 6,005,508.

As per claims 15, Chow et al and Davis disclose every feature of the claimed invention but does not explicitly teach that the encoding and decoding algorithms refer to algorithms for encoding and decoding transmission format. Tsui discloses decoding algorithm for decoding transmission format see col. 5, lines 46-48 and col. 4, lines 63-65. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Chow et al so as to allow the receiver with the capability to translate the received signal into the original format corresponding to the transmitted signal and to allow the transmitter with the enhanced capability to convert the signal in a format suitable for transmission.

As per claims 22 and 24, it would have been obvious to one skill in the art to incorporate such a teaching in Chow et al so as to allow the receiver with the capability to translate the received signal into the original format corresponding to the transmitted signal.

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Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al.

As applied to claim 1 above, Chow et al discloses every feature of the claimed invention but does not explicitly teach the decoding algorithm is installed by the user. However, such limitation does not include any inventive step. It would have been obvious to one of ordinary skill in the art to have the receiver unit user installing the decoding algorithm in the programmable processor so as to avoid the need to dispatch a technician that would have resulted in additional cost to the user since a fee would have normally been charged for the service.

### ***Allowable Subject Matter***

Claims 6-9, 11, 14, 18 and 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 25-26 would be allowable if amended to overcome the objection set forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is (571)

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272-3020. The examiner can normally be reached on Monday-Thursday from 7:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on (571) 272-3086.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

  
Jean B. Corrieus

Primary Examiner

TC-2600

11-15-04